Attorney's Docket No.: 14219-090US1 / P2003, 0002

Applicant: Patric Heide Serial No.: 10/541,994 Filed: August 9, 2005

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

(Currently Amended) A radar transceiver comprising:

an oscillator comprising an active circuit component, a resonant circuit, and a circuit component for frequency tuning,

a mixer comprising a diode and one or more passive circuit components, [[and]]

a substrate comprising multiple layers, the multiple layers comprising at least two dielectric layers stacked, the substrate having a metallized top surface, a metallized bottom surface, and metallized internal surfaces located between the dielectric layers, wherein an electronic component on the metallized top surface of the substrate comprises at least one active or nonlinear circuit component of the mixer and at least one active or nonlinear circuit component of the oscillator, and wherein at least one passive circuit component of the mixer or the resonant circuit of the oscillator is at least partially integrated in one or more of the metallized internal surfaces of the substrate.

a cover film that at least partly covers the electronic component, and

a metal layer that at least partly covers the cover film.

 (Previously Presented) The radar transceiver of claim 1, wherein the oscillator comprises a voltage-controlled oscillator (VCO). Applicant: Patric Heide Attorney's Docket No.: 14219-090US1 / P2003, 0002

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3. (Previously Presented) The radar transceiver of claim 1, wherein the circuit

component for frequency tuning comprises a nonlinear circuit component.

4. (Previously Presented) The radar transceiver of claim 1, wherein the circuit

component for frequency tuning comprises a varactor diode.

5. (Previously Presented) The radar transceiver of claim 1, wherein the mixer

comprises a hybrid ring that is integrated in the substrate.

6. (Previously Presented) The radar transceiver of claim 1, further comprising a

frequency divider for dividing a frequency of an output signal of the oscillator.

7. (Previously Presented) The radar transceiver of claim 6, wherein the frequency

divider comprises a phase-locked loop.

8. (Withdrawn) The radar transceiver of claim 1, wherein the metallized bottom surface

of the substrate comprises a terminal for connection for connecting to an external antenna.

(Withdrawn) The radar transceiver of claim 1, further comprising a part of at least

one antenna that is on the top metallized surface of the substrate or the bottom metallized surface of

the substrate.

10. (Canceled)

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> 11. (Canceled)

12. (Withdrawn) The radar transceiver of claim 10, further comprising a casting resin

that at least partly encases the cover film.

13. (Withdrawn) The radar transceiver of claim 1, wherein at least one circuit element

selected from among an inductance, a capacitance, a line or line termination is integrated in the

substrate.

14. (Withdrawn) The radar transceiver of claim 1, wherein the electronic component

comprises a microwave chip, a millimeter wave chip or an integrated circuit element.

15. (Withdrawn) The radar transceiver according to claim 14, wherein the integrated

circuit element comprises a monolithic microwave integrated circuit element.

16 (Withdrawn) The radar transceiver of claim 1, wherein the electronic component is

mechanically and electrically connected to the substrate via flip chip technology or surface mounted

device technology.

(Withdrawn) The radar transceiver of claim 1, further comprising one or more 17.

electronic components selected from among the following components: a discrete passive circuit

element including a coil, a capacitor and a resistor, or which presents a compact circuit block, which

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contains at least one individual electronic component selected from among a coil, a capacitor or a resistor, including any combination of individual components.

18. (Withdrawn) The radar transceiver of claim 1, wherein the substrate comprises at least two layers of low temperature cofired ceramic, or high temperature cofired ceramic.

(Withdrawn) The radar transceiver of claim 1, further comprising:
 a mixer diode or a chip element that performs a mixer function; and

a integrated circuit element that comprises at least a part of the oscillator and a frequency divider.

- 20. (Withdrawn) The radar transceiver of claim 1, wherein at least a part of the oscillator, a frequency divider, and the mixer is provided in one, two or three integrated circuit elements.
- 21. (Previously Presented) The radar transceiver of claim 1, wherein frequency modulation occurs via frequency keying of the oscillator, an amplifier associated with the radar transceiver, or a very high frequency switch associated with the radar transceiver.
- 22. (Previously Presented) The radar transceiver of claim 1, wherein amplitude modulation occurs via amplitude keying of the oscillator, an amplifier associated with the radar transceiver, or a very high frequency switch associated with the radar transceiver.

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transceiver.

23. (Withdrawn) The radar transceiver of claim 1, further comprising an integrated circuit element comprising an amplifier that is in a transmission or reception path of the radar

- 24. (Withdrawn) The radar transceiver of claim 1, wherein the radar transceiver comprises a low temperature cofired ceramic module or as partial modules that are electrically connected with each other, where said partial modules are installed by machine using surface mounted device technology.
- (Withdrawn) The radar transceiver of claim 1, wherein the substrate comprises as a monolithic ceramic object.
- 26. (Previously Presented) The radar transceiver of claim 1, wherein the passive circuit component of the mixer, resonant circuit of the oscillator, or both, are at least partially integrated in at least one internal metallized surface of the substrate.
- 27. (Previously Presented) The radar transceiver of claim 1, wherein at least one passive circuit component of the mixer or the resonant circuit of the oscillator is at least partially integrated in more than one of the metallized surfaces of the substrate.
- 28. (Previously Presented) The radar transceiver of claim 1, wherein the one or more passive circuit components of the mixer and the resonant circuit of the oscillator are integrated in the metallized internal surfaces of the substrate.